

**IN THE UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION**

TRADING TECHNOLOGIES )  
INTERNATIONAL, INC., )  
 )  
*Plaintiff,* ) No. 10 C 715  
 )  
v. ) Judge Virginia M. Kendall  
 )  
IBG LLC, *et al,* )  
 )  
*Defendants.* )

**MEMORANDUM OPINION AND ORDER**

Plaintiff Trading Technologies (“TT”) brought this action to recover damages caused by Defendant IBG’s alleged infringement of four TT patents. One of IBG’s defenses is that the patents-in-suit are obvious and therefore invalid. In support of this invalidity contention, IBG cites a document created by the Tokyo Stock Exchange (the “TSE”) entitled “Futures/Option Purchasing System Trading Terminal Operation Guide” (the “TSE Reference”). According to IBG, the TSE Reference constitutes prior art, which renders the patents-in-suit invalid for obviousness. Naturally, TT disputes this and now moves for summary judgment that the TSE Reference does not, as a matter of law, constitute prior art. For the reasons set forth below, TT’s Motion for Summary Judgment (Dkt. 1370) is denied.

**BACKGROUND**

TT brought this action against IBG for patent infringement of U.S. patent numbers 6,766,304 (“304 Patent”), 6,722,132 (“132 Patent”), 7,676,411 (“411 Patent”), and 7,813,996 (“996 Patent”) (collectively, the “patents-in-suit”). (Dkt. 1118 ¶¶ 11, 34, 57, 76.) IBG’s final invalidity contentions state that the TSE Reference renders the patents-in-suit obvious. (Dkt. 1454 ¶ 10.)

The TSE Reference is a document created in or around August of 1998 by the TSE. (Dkt. 1529 ¶¶ 1, 4.) The document was originally written in Japanese (Dkt. 1374-6) but has been translated to English for purposes of litigation in U.S. courts. (Dkt. 1374-2.) The TSE Reference is a manual that the TSE prepared due to changes in the way trading terminals were operating. (Dkt. 1529 ¶ 2.)

The TSE produced the TSE Reference from its files in 2005 for the *eSpeed* litigation. (Dkt. 1454 ¶ 11.) No third party has ever produced a copy of the TSE Reference. (*Id.* ¶ 13.)

According to Atsushi Kawashima, a TSE employee, the TSE Reference was given to approximately 200 companies that participated in the exchange, namely, “securities companies for banks [that could] carry out futures options trading at the TSE.” (Dkt 1454 ¶ 29; Dkt. 1529 ¶ 6.) Kawashima was involved in the management and development of the TSE futures options trading system. (Dkt. 1529 ¶ 10.) Kawashima himself handed out some, but not all, copies of the TSE Reference to individuals who came to the office where he worked. (Dkt. 1454 ¶ 29; Dkt. 1529 ¶ 6.) Kawashima testified that his office had participants<sup>1</sup> come to the office to receive two paper copies of the TSE Reference. (Dkt. 1454 ¶ 28; Dkt. 1374-1 at p. 23.) Mr. Kawashima did not personally document who received copies of the TSE Reference. (Dkt. 1454 ¶ 30.) The Parties dispute whether this means that anyone documented who received copies of the TSE Reference, although the Parties have not produced a log or any similar evidence listing who received the TSE Reference or which employees at TSE participants viewed the TSE Reference. (*Id.*) Kawashima also testified that the TSE placed no restrictions on what participants could do with the TSE Reference once they received it. (Dkt. 1529 ¶ 9.)

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<sup>1</sup> “Participants” are companies that could conduct futures options trading at the TSE.

Mr. Kawashima appeared voluntarily at IBG's request for a deposition in 2016. (Dkt. 1454 ¶ 47.) Prior to his deposition, he met with IBG's counsel and went through anticipated questions that might come up in the deposition. (*Id.* ¶ 48.) One of the questions that IBG counsel discussed with him prior to his deposition pertained to the manner by which people came to his office to pick up the TSE Reference in 1998. (*Id.* ¶ 49.)

IBG has not produced evidence about how many copies of the TSE Reference were distributed, although a TSE memo written in the future tense explains that two copies per company "are to be sent to all members and special participants." (Dkt. 1454 ¶ 34.) There is also no evidence that the TSE Reference was distributed at a trade show. (*Id.* ¶ 22.)

A draft letter dated September 12, 1997 provided notice to TSE participants of a September 29, 1997 briefing to discuss the TSE System, but not the TSE Reference. (Dkt. 1529 ¶ 19.) Other letters and a memorandum also provide circumstantial evidence that TSE scheduled such a meeting. (*Id.* ¶¶ 12, 14, 15, 16, 18.) The purpose of convening this meeting was "that there was a plan in place at that time to put online a new futures and options trading system, and so this was an opportunity to explain the changes and summarize this new system compared to the old system." (*Id.* ¶ 21.)<sup>2</sup> TSE participants were invited to the briefing; U.S. participants at the time included Merrill Lynch and Morgan Stanley. (*Id.* ¶ 22.) The types or people who came to the briefing were traders or people who worked for TSE participants installing trading terminals. (*Id.* ¶ 24.)

Hiroyuki Kida, a former employee of Midas Kapiti, a company that provided software solutions to financial institutions, testified that he saw the TSE System—as described in the TSE Reference—being used in the offices of BNP Paribas, UBS, Credit Lyonnaise, and Societe General in 1998. (Dkt. 1529 ¶ 25.)

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<sup>2</sup> TT does not dispute this testimony, but instead points out that this is a discussion of the TSE System, not the TSE Reference. (Dkt. 1529 ¶ 21.)

According to Bernard Donefer, one of IBG’s experts, the TSE Reference would have been necessary for trading personnel to understand how to interface with the TSE’s updated trading terminals. (*Id.* ¶ 27.) Donefer also posits that TSE participants employed technical support personnel, whom he believes were persons of ordinary skill in the art (“POSAs”)<sup>3</sup>, who needed the TSE Reference to configure their systems to trade securities through the TSE. (*Id.*) A TT expert, Christopher Thomas, disagrees with all of this, including Donefer’s opinion that the technical support personnel were POSAs. (Dkt. 1471-16 ¶¶ 347–52.)

The Patent Trial and Appeal Board (“PTAB”) has on four occasions held that the TSE Reference qualified as prior art. (Dkt. 1529 ¶ 29); *see also, e.g., IBG, LLC v. Trading Techs. Int’l, Inc.*, CBM2016-00054, at \*43 (PTAB Oct. 17, 2017) (“We are persuaded by [IBG’s] showing, which we adopt as our own, that [the TSE Reference] qualifies as prior art under 35 U.S.C. § 102(a). . . . The evidence that is before us, both circumstantial and direct, supports a finding that TSE was made accessible to securities companies and all of the personnel in such a company, who would have employed technical support personnel, such as computer scientists or engineers, who would have needed a copy of the TSE [Reference] to configure their own system to electronically communicate, and to continue to trade securities, with the Tokyo Stock Exchange. Thus, the securities companies would have included computer scientists or engineers, as well as traders. We find that all such persons who worked at the securities companies would have been interested members of the relevant public.”). Specifically, the PTAB found that TSE participant companies would have employed technical personnel, like GUI designers, and that those companies would have made the TSE Reference available to its GUI designers “to configure their

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<sup>3</sup> “POSA” is a term of art in patent law. *See* 35 U.S.C. § 103 (“A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.”).

system to electronically communicate, and to continue to trade securities, with the [TSE], based on the changes in operation of the terminals explained in the TSE [Reference].” *IBG, LLC*, CBM2016-00054, at \*47.<sup>4</sup> The PTAB’s decisions pertaining to the ‘132 and ‘411 Patents were vacated for lack of jurisdiction. (Dkt. 1529 ¶ 29.) The other two proceedings involved patents that are not at issue in this case. (*Id.*)

## **LEGAL STANDARD**

Summary judgment is proper when “the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed. R. Civ. P. 56(a); *see, e.g., Reed v. Columbia St. Mary’s Hosp.*, 915 F.3d 473, 485 (7th Cir. 2019). The parties genuinely dispute a material fact when “the evidence is such that a reasonable jury could return a verdict for the nonmoving party.” *Daugherty v. Page*, 906 F.3d 606, 609–10 (7th Cir. 2018) (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986)). In determining whether a genuine issue of material fact exists, the Court draws all reasonable inferences in favor of the party opposing the motion. *Anderson*, 477 U.S. at 255; *Zander v. Orlich*, 907 F.3d 956, 959 (7th Cir. 2018).

## **DISCUSSION**

Title 35 U.S.C. § 102(a)(1) provides that “a person shall be entitled to a patent—unless the claimed invention was patented, described in printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention . . . .” Whether a reference qualifies as a “printed publication” under this definition “is a legal conclusion

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<sup>4</sup> The PTAB decision quoted herein pertains to TT’s ‘768 Patent, which is not at issue in this case. The factual inquiry that PTAB made in that decision is nonetheless identical to the inquiry that the Court makes for purposes of the instant Motion—namely, determining whether the TSE Reference was publicly available to POSAs. Unlike some of the other PTAB decisions related to the TSE Reference, PTAB’s decision pertaining to the ‘768 Patent has not been disrupted. Although the Federal Circuit held that PTAB members were unconstitutionally appointed, that opinion only vacated PTAB decisions “where final written decisions were issued and where litigants present an Appointments Clause challenge on appeal.” *Arthrex, Inc. v. Smith & Nephew, Inc.*, 941 F.3d 1320, 1340 (Fed. Cir. 2019)

based on underlying factual findings.” *Jazz Pharm., Inc. v. Amneal Pharm., LLC*, 895 F.3d 1347, 1356 (Fed. Cir. 2018). Public accessibility is the touchstone for whether a reference qualifies as a printed publication under § 102. *Medtronic, Inc. v. Barry*, 891 F.3d 1368, 1380 (Fed. Cir. 2018). Courts consider a reference to be publicly accessible if it was “disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art, exercising reasonable diligence, can locate it.” *Jazz Pharm.*, 895 F.3d at 1355; *see also Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331, 1348 (Fed Cir. 2016). Determining the public accessibility of a reference requires an inquiry “into the facts and circumstances surrounding the reference’s disclosure to members of the public.” *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004). Where the party challenging the validity of the patent argues that the reference was “otherwise made available” to POSAs, the party must show that there exists an “adequate roadmap” available to a POSA to locate the potentially invalidating reference. *Blue Calypso*, 815 F.3d at 1350. The party challenging the validity of a patent—in this case, IBG—bears the burden of establishing invalidity, including a reference’s public accessibility, by clear and convincing evidence. *See* 35 U.S.C. § 3582 (establishing a rebuttable presumption of patent validity and placing the burden of establishing invalidity on the party asserting invalidity).

The sole question before the Court then for purposes of this Motion is whether a reasonable jury could conclude that IBG has presented clear and convincing evidence that the TSE Reference was publicly accessible to POSAs prior to the effective date of the claimed TT invention.

Viewing the evidence in the light most favorable to IBG, IBG can establish the following about the public accessibility of the TSE Reference. First, Kawashima testified that two copies of

the TSE Reference were given to each of the 200 TSE participants.<sup>5</sup> Second, Kida explained that he saw the TSE System being used in certain offices of TSE participants in 1998. Third, IBG expert Bernard Donefer testified that TSE participants would have employed POSAs and they would have given the TSE Reference to their POSAs to understand how to interface with TSE's updated trading terminals. Fourth, the TSE Reference includes instructions for system configuration and troubleshooting vis-à-vis the TSE System. Fifth, the TSE invited participants to a meeting about the TSE System, and, according to Kawashima, the people who would have attended this meeting were people who installed terminals for the participants. Sixth, several letters and a memorandum confirm that TSE scheduled such a meeting.

A reasonable jury could conclude on the basis of this evidence—as the PTAB did—that POSAs had an adequate roadmap to locate the TSE Reference during the relevant time period. Given Kida's testimony that he saw the TSE System being used at some TSE participants' offices, it is reasonable for jurors to infer that some TSE participants' employees had access to the TSE Reference or could have accessed it through reasonable diligence. A reasonable jury could also credit Bernard Donefer's opinion and infer that the participants' employees who had access to the TSE Reference needed to have technical backgrounds in order to set up their trading terminals. This means that a reasonable jury could determine that the individuals who had access to the TSE Reference, or who could access it through reasonable diligence, were POSAs. Moreover, given that the TSE's policy was to hand out the TSE Reference to participants and place no restrictions on its further dissemination, it is reasonable to infer that at least some of the 200 participants would have stored the document in a place that would be accessible to POSAs. IBG has not presented

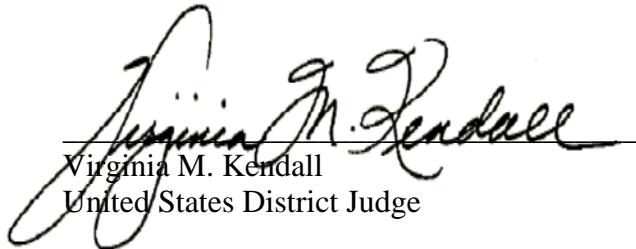
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<sup>5</sup> TT urges the Court to consider that Kawashima might be an interested or otherwise biased witness, but this is an issue that goes to the credibility of the witness, which falls solely within the province of the jury. For purposes of this Motion, the Court views the Kawashima testimony in the light most favorable to IBG.

evidence of any particular POSA ever receiving the TSE Reference, but that is not its burden. IBG need only present clear and convincing circumstantial evidence for a reasonable jury to infer that some POSAs could have accessed the TSE Reference through reasonable diligence. Viewing this evidence in the light most favorable to IBG, the sum total of the circumstantial evidence could lead a reasonable jury to conclude that clear and convincing evidence supports such an inference.

### **CONCLUSION**

A reasonable jury could make the requisite factual findings to support the conclusion that the TSE Reference was a “printed publication” within the meaning of 35 U.S.C. § 102 prior to the effective date of TT’s claimed invention. Accordingly, TT’s Motion for Summary Judgment that the TSE Reference Does Not Constitute Prior Art [1370] is denied.



Virginia M. Kendall  
United States District Judge

Date: November 12, 2020